Department of LABOR AND INDUSTRIES

ERGONOMICS
Worker Protection

Ergonomics demonstration project: Fruit growing and packing

Need

Despite many advances that the fruit growing and packing industry has made in mechanization, the industry still relies heavily on manual labor in order to ensure the quality of the product. Many of the jobs that are found throughout the industry involve risk factors that are covered by the ergonomics rule, especially highly repetitive motions and frequent, awkward lifting. A recent study by the University of Washington found a high prevalence of Work-Related Musculoskeletal Disorder (WMSD) symptoms among fruit packers. The study also found several WMSD hazards present, and identified some potential solutions.

Goals

The goals of this demonstration project are to show that the fruit growing and packing industry can:

- Identify caution zone jobs in orchards and packinghouses.
- Determine risk factors that are likely to reach hazard levels.
- Identify and implement controls for these hazards in order to comply with the ergonomics rule.
- Work with the Department of Labor and Industries to identify technological and economic feasibility issues that may affect the types of controls that can be implemented.

Project design

The Washington State Farm Bureau recognized that the rule would apply to many of the operations in fruit growing and packing, and requested a demonstration project to look at these issues. Separately, a fruit growing and packing company that had participated in the University of Washington study also asked to be part of the project.

Growers and packers identified jobs that they felt would be covered by the rule and were likely to involve hazards that would require controls. A Department of Labor and Industries ergonomist videotaped and analyzed the jobs and interviewed management and workers in order to verify these assumptions. Initially the project has focused on the packinghouses, which are a fixed environment with steady work that is more readily analyzed. The project is beginning to include more analysis of work in the orchards, which is seasonal and occurs for brief, but intensive, periods.

Several hazards common to packing operations have been identified, and there is good agreement between the demonstration project and University of Washington study findings. As hazards are identified preliminary reports are written, and include identification of possible controls. Some of the packinghouses have already implemented some controls, and these will be included in the economic feasibility discussion.

Attending meetings has proven difficult for growers and packers due to time constraints. Therefore, the project may use a survey sent to employer and employee representatives in order to solicit control ideas from the industry. Once all hazards and potential controls have been identified, a report will be written and shared with the industry though the Farm Bureau and the L&I website.

Timetable

October 2000.....Project began
February 2001 .....Initial hazard identification and preliminary report
August 2001.....Meeting with industry to discuss finding solutions
January 2002.....Scheduled for completion

Results

The following products are expected as a result of this project:

- A list of caution zone jobs and hazards common to jobs in the fruit growing and packing industry.
- A list of various best and acceptable practices that will reduce each of the hazards.
- A discussion of the technological and economic feasibility issues that were identified, along with an indication of how compliance might differ between large and small operations.

The report will clearly detail options that employers in the industry have for complying with the ergonomics rule. The project as a whole will also serve as an example to other industries of a method for working cooperatively to address ergonomics issues.